

3.1 Solving Systems by Graphing

System of equations-- 2 or more
equations with the same
variables

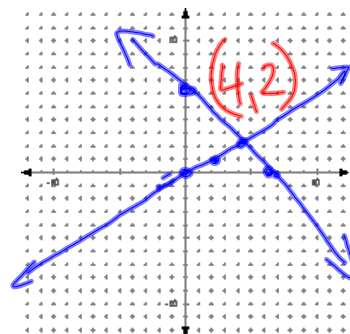
Ex 1:

① $x - 2y = 0$ Solve by graphing

② $x + y = 6$

① $(0, 0)$ $y = \frac{1}{2}x$

② $(0, 6)$
 $(6, 0)$



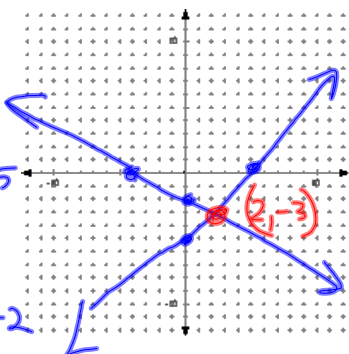
Ex 2:

① $x - y = 5$

② $x + 2y = -4$

① $(0, -5)$ $y = x - 5$
 $(5, 0)$

② $(0, -2)$ $y = -\frac{1}{2}x - 2$
 $(-4, 0)$



Consistent:

at least one solution

Inconsistent:

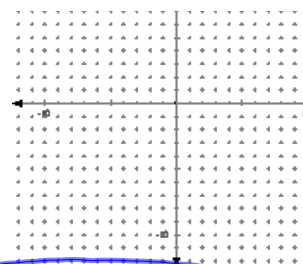
no solution

Dependent: ∞ number of solutions

Independent:
exactly one solution

Ex 3:

$$\begin{aligned}9x - 6y &= -6 \\6x - 4y &= -4\end{aligned}$$



$3x - 2y = -2$
 $3x - 2y = -2$
Consistent & dependent

∞ # sol's on the line $9x - 6y = -6$